RECORD OF DECISION

Rhode Island
Freight Rail Improvement Project

by the
Federal Highway Administration
and Federal Railroad Administration

PROJECT OVERVIEW

This Record of Decision (ROD) contains the reasoning employed to reach a decision on implementation of a freight rail alternative for the project as described below. It is issued under the requirements of Chapter 40 of the Code of Federal Regulations (CFR) 1502.2 and Chapter 23 of CFR 771.127.

The State of Rhode Island proposes to implement a Freight Rail Improvement Project (FRIP), including track and overhead bridge construction and rehabilitation, within a 22-mile section of Amtrak's Northeast Corridor (NEC) right-of-way (ROW) in Rhode Island. These improvements have been deemed necessary to preserve and expand the capabilities of the rail infrastructure to accommodate future freight movements and aid in the redevelopment of the former Quonset Point/Davisville Naval facility now known as the Quonset/Davisville Port and Commerce Park (Q/D). This would be accomplished by creating an environment for freight rail which would allow the use of double-stack container and tri-level automobile carrier rail cars. As a result of the FRIP, freight rail movements would enjoy increased operational flexibility, given the anticipated restricted operating windows expected due to the increased frequency of train service during the upcoming NEC rail project. Providing the sufficient vertical and horizontal clearances to allow the passage of double-stack containers cars and tri-level auto carriers is another major goal of the project.

HISTORY

A combined Major Investment Study-Draft Environmental Impact Study-Draft 4(f) document (DEIS) was prepared in conformance with 40 CFR Part 1500, the Council on Environmental Quality's *Regulations for Implementing the Procedural Requirements of the National Environmental Policy Act (NEPA) of 1969, as amended*, and 23 CFR 771, the Federal Highway Administration's (FHWA) *Environmental Impact and Related Procedures.* Two build alternatives (Partial and Full), as well as the No Build Alternative, were examined in the DEIS.

The DEIS was published in February 1996 and distributed to all interested parties and governmental agencies for their review and comment. A complete distribution list is provided in Appendix 1A of that document. In accordance with NEPA requirements, formal public hearings were held during the circulation period. At the conclusion of the public comment period, the preferred alternative was identified. The Final Environmental Impact Statement—Final 4(f) document (FEIS), which was published on 2/13/98, and this ROD represent the culmination of the NEPA environmental review process for the FRIP that began in May 1994.

The input received through coordination and public outreach efforts was fully evaluated in reaching a decision on the preferred alternative. The input was integral to the consideration and implementation of design modifications to reduce social, economic, and environmental impacts. The preferred alternative (Alternative No. 3) is described in detail in Chapter 2 of the FEIS.

DECISION AND SUMMARY OF FINDINGS

The Rhode Island Department of Transportation (RIDOT) initiated the FRIP to address the needs of existing and future freight rail customers. The goals of the project are to ensure adequate capacity and flexibility for existing and future freight rail transportation and to eliminate physical constraints on the movement of freight to and from Q/D and other industrial areas along the project study corridor. Based on the work of previous studies, regional planning objectives, and input from the public scoping process, objectives have been established to meet these goals (see the FEIS Executive Summary). These goals and objectives were used in the development, screening, and evaluation of alternatives originally described in the DEIS and led to the development of Alternative No. 3 (the Preferred Alternative) evaluated in the FEIS.

Four alternatives were considered: the No Build, Partial Build, Full Build, and Alternative No. 3. These alternatives are summarized below.

No Build Alternative

Under the No Build Alternative, all existing and projected future freight service was assumed to continue operations using the same mix of dedicated track, mainline track, and passing sidings within the NEC as today. This alternative did not assume any construction or operational changes to freight service other than rail improvements planned as part of the Northeast Corridor Improvement Project (NECIP) Electrification. These improvements include: new passing siding at Hillsgrove in Warwick; new crossovers west of Cranston to provide access to Cranston Yard and the Port of Providence; rehabilitation of 4.3 miles of Track 7, which is an existing freight-dedicated track between Lawn interlocking in Pawtucket and Atwells interlocking in Providence; installation of a new crossover at Lawn; and removal of the Pettaconsett Avenue Bridge in Warwick and the Adelaide Avenue (Providence) and Central Street (Central Falls) footbridges[1]. The new Hillsgrove siding would allow freight trains to service customers or leave the mainline. As part of NECIP Electrification, Amtrak would maintain historic mainline and siding clearances which would accommodate the type of freight equipment operating on the corridor today, but would not provide the required clearance for double-stack containers and tri-level automobile carriers.

Full Build Alternative

The Full Build Alternative would provide unrestricted operating capacity for freight by means of a dedicated rail line for 22 miles between Q/D and Boston Switch using a combination of existing, currently inactive and new track parallel to the Amtrak mainline upgraded or built to Federal Railroad Administration (FRA) Class 4 standards (see 49 CFR Part 213). Freight track would be lowered under thirty-five (35) overhead highway or pedestrian bridges and two (2) railroad station structures, in order to provide the 21-foot-1-inch vertical clearance for high capacity freight equipment. The alternative would also require the construction of parallel spans at thirteen (13)

[1] The project study area is referred to as running from Davisville in the "West" to Central Falls in the "East," to be consistent with railroad convention. Similarly, the side of the track towards the shoreline, or seaward, will be referred to as the "Southside" and the inland side of the track will be referred to as the "Northside." Direction, expressed in lower case letters (e.g., west), will refer to geographical direction rather than the capitalized "railroad direction" (West to Davisville).

existing undergrade bridges to carry the track over roadways, walkways, or water bodies. The Full Build Alternative assumed all improvements are implemented and funded as described in the No Build Alternative. In addition, it would require the construction of approximately 29,295 linear feet of retaining wall to support the embankment for the new freight track.

The freight rail line would be constructed on the Northside of the NEC ROW from Davisville Road (milepost 168.3) to approximately Boston Post Road (milepost 169.6) where the tracks would shift and a new track would be constructed on the Southside to avoid or minimize impacts to wetlands and coastal resources in the Hunt River-Greenwich Bay area. The existing Amtrak mainline Track No. 1 would then be converted to freight operations and Amtrak passenger trains would occupy the new track on the Southside for approximately five (5) miles to a point beyond Apponaug Cove in Warwick where the tracks would shift back to their original location. The freight track would then continue on the north side of the ROW using a combination of existing sidings, new track to Atwells Avenue, and existing, though upgraded, track between Atwells Avenue and Boston Switch in Central Falls.

Under the Full Build Alternative, freight would operate exclusively on the Northside track, and the faster passenger trains would operate on the two (2) Southside tracks. The only potential interfaces with passenger trains would occur from freight movements to sidings on the Southside to access customers at Q/D, the Port of Providence at Cranston Yard, Orms, Pawtucket Yard, and West River Industrial Park in Pawtucket.

Partial Build Alternative

The Partial Build Alternative would utilize existing freight-dedicated track and sidings where available, the Amtrak mainline, the future Hillsgrove siding, and provide for two (2) additional passing sidings, one in East Greenwich and a second in Cranston. Railbeds under thirty-two (32) highway bridges would also be lowered to achieve the desired vertical clearance for operating double-stack cars and tri-level auto carriers on the existing freight-dedicated track and the electrified mainline. The new East Greenwich and Cranston sidings would be provided to avoid more extensive lowering of the two (2) mainline tracks. The Partial Build Alternative assumes all improvements described in the No Build Alternative. All track under the FRIP will be upgraded to FRA Class 4 standards, which involves improvements to allow trains to travel at higher speeds. In addition, 3,175 feet of retaining wall would be constructed to support the rail embankment. Similar to today, freight rail would operate on the Amtrak mainline for approximately 6.5 miles where dedicated track or sidings do not exist.

Alternative No. 3

As previously noted, Alternative No. 3 is the preferred alternative; it was evaluated in the FEIS and is a modification of the Partial Build Alternative that utilizes an existing freight track, existing mainline tracks, and a new freight-dedicated track within the NEC ROW. The development of Alternative No. 3 has taken into account Amtrak's mitigation requirements for its Electrification Project and also includes an additional freight siding installed for operational purposes in the Cranston area and upgrading the existing third track from the Lawn Interlocking in Pawtucket to

Boston Switch in Central Falls with all freight tracks brought to FRA Class 4 standards. Under this Preferred Alternative, freight traffic would operate on Amtrak's main passenger lines for approximately five (5) miles where dedicated freight track is not in place.

This alternative provides the capability to service double-stack freight cars and tri-level automobile carriers by providing required vertical clearance[2] through modifications at forty-five (45) structures along the ROW. Construction would include: Track lowering under thirty-seven (37) highway bridges; raising one (1) pedestrian bridge (the Garnet Street footbridge); raising two (2) highway bridges in conjunction with track lowering (Rocky Hollow Road and Dexter Street); removal of one (1) pedestrian bridge abutment (Adelaide Avenue); track lowering under two (2) station structures; parallel bridge construction at two (2) sites, Lincoln Avenue and Wellington Avenue; and modification of three (3) culvert crossings. Approximately 16,000 linear feet of retaining wall would be constructed under this alternative.

Based upon the analysis contained in the FEIS, Alternative No. 3 provides the best Alternative to satisfy the project's purpose and need. Alternative No. 3 provides adequate clearances and operating windows to preserve and expand existing freight operations allowing for the introduction of double-stack and tri-level automobile carriers onto the Northeast Corridor between Boston Switch and Davisville. Further, this alternative maximizes use of the existing right-of-way and minimizes acquisition and impact to social, economic, and environmental resources.

The public participation process identified the need to focus on modifications to the alternatives that provided a safe degree of passenger/freight separation while reducing the impacts associated with construction in the sensitive areas such as coastline areas along Greenwich Bay. Alternative No. 3 (a modified Partial Build alternative) satisfies these objectives.

MAJOR FACTORS INFLUENCING THE SELECTION OF ALTERNATIVES

The DEIS presented three alternatives: the No Build, the Partial Build, and the Full Build. During the public comment period it was evident from feedback that due to significant environmental impacts and costs, the Full Build Alternative was undesirable. Further, support surfaced for the Partial Build Alternative, although its limitations were noted. A modification of the Partial Build that provided more operational flexibility and safeguards than the Partial Build while minimizing environmental impacts and costs associated with the Full Build Alternative was suggested by several agencies and individuals.

Following the end of the comment period the FHWA, FRA, and RIDOT reviewed this input and considered it in their efforts to develop the Preferred Alternative (see Chapter 2 of the FEIS for a detailed description). Based on comments received, the options were reevaluated as part of a collaborative process to provide a cost-effective alternative which incorporated the positive elements of the previous build alternatives, while satisfying goals developed in the scoping phase of the

[2] The vertical clearance envelopes used to develop Alternative No. 3 were 21'-1" from top of rail to the underside of the overhead structure for the freight-dedicated track and 23'-1½" where freight will use the electrified mainlines. The higher clearance envelope is necessary to allow for catenary wires beneath overhead structures.

project. The Preferred Alternative evaluated in the FEIS is a modified Partial Build Alternative which provides a safe level of separation between freight and passenger trains similar to the Full Build Alternative without its cost and environmental impacts.

When compared to the Partial Build presented in the DEIS, the Preferred Alternative provides greater operational flexibility and safety by minimizing the amount of trackage that is shared by freight and high-speed passenger traffic. The amount of shared trackage is reduced by approximately 1.5 miles for the Preferred Alternative as compared to the proposed Partial Build. This modification also avoids the need for freight crossover movements between Hillsgrove in Warwick and Wellington Avenue in Cranston, thereby further enhancing safety. The Preferred Alternative also eliminates the proposed siding in East Greenwich, thereby avoiding impacts to valuable coastal and historic resources. These advantages are obtained at an added cost estimated at $6 million.

When compared to the Full Build presented in the DEIS, the Preferred Alternative avoids substantial construction in the sensitive coastal and historic areas in East Greenwich. It also presents a substantial cost savings (estimated at $45 million) over the Full Build, thereby enhancing its constructability. The Preferred Alternative reduces the number of new parallel bridge spans from 13 to 2, the amount of new trackage by approximately 43 percent, and the construction period from 7 years to 4 years. These benefits clearly outweigh the cost of the minor loss of operational flexibility when comparing the Preferred Alternative to the Full Build.

The alternative selected is the least environmentally damaging alternative that meets the project purpose and need.

SECTION 4(F)

Section 4(f) of the U.S. Department of Transportation Act of 1966 was enacted to protect significant publicly owned public parks, recreations areas, or wildlife and waterfowl refuges and significant historic sites. When it has been determined that a use of a Section 4(f) property will occur, it must be found that there is no feasible and prudent alternative to the use Section 4(f) resources and that the selected alternative includes all possible planning to minimize harm to these resources for the project to proceed.

The Preferred Alternative would use three Section 4(f) protected resources. These uses involve two strip acquisitions from historic resource properties, the construction of a parallel bridge span adjacent to a historic resource, and track lowering below a historic resource (see Appendix 5A of the FEIS). Based upon the information in the Final Section 4(f) Evaluation contained in the FEIS, FHWA has determined that there are no feasible and prudent alternatives to the use of land from Section 4(f) resources. Further, construction of the Preferred Alternative includes all possible planning to minimize harm to these resources. The FRA has carefully evaluated the 4(f) and concurs in FHWA's findings.

While the No Build Alternative would not involve the use of 4(f) protected resources, it does not satisfy the basic purpose and need of the project and therefore is not considered a feasible and

prudent alternative. Further, a finding of no effect regarding resources protected under the National Historic Preservation Act has been agreed to by the Rhode Island State Historic Preservation Officer (RISHPO) and Blackstone River Valley National Heritage Corridor Commission personnel, thereby completing the requirements of Section 106 of the National Historic Preservation Act .

MEASURES TO MINIMIZE HARM OF THE SELECTED ALTERNATIVE

FHWA and FRA will work closely with RIDOT to ensure that all practical measures to avoid or minimize adverse environmental impacts, as outlined in the FEIS, will be implemented. The following measures (described in more detail in the referenced sections of the FEIS and Final 4(f) Evaluation) have been identified.

Implementation of the Preferred Alternative would result in construction period (short-term) impacts and impacts associated with the long-term operation of the project. FHWA and FRA have determined that the measures described below are appropriate to mitigate the impacts for the selected alternative and will be implemented.

RIDOT will administer implementation of all the mitigation measures described in the FEIS, and FHWA and FRA will ensure that they are properly implemented via the monitoring and enforcement program discussed later in this document.

ROW Acquisitions

Some (minor) ROW would have to be acquired in fee simple and by permanent and temporary easements where new track is to be constructed or other related construction occurs beyond the existing ROW (see Section 4.1). RIDOT will ensure all property owners receive "just compensation" for acquisition of their property. The measure of just compensation is generally the fair market value of the property acquired at the time just prior to the taking. Further, all acquisitions would be completed in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

Cultural Resources

As indicated previously a Section 4(f) evaluation has been developed which addresses impacts to historic resources (see Appendix 3B of the FEIS). Two 4(f) resources are proposed for mitigation as per the Final Section 4(f) Evaluation: the Wellington Avenue Bridge and Pawtucket/Central Falls Railroad Station. Measures to minimize harm include:

Wellington Avenue Bridge:

- Retaining wall proposed between the historic east abutment and new abutment will be set back one to two feet where it joins the historic abutment;
- New abutments will have a rusticated surface treatment comparable to the pattern of the coursed ashlar faces of the historic abutments; and
- RISHPO will review and approve plans for the new Wellington Avenue/Pawtuxet River parallel bridge.

Pawtucket/Central Falls Railroad Station:

- Provide foundation protection at the north building abutment and northernmost piers, as well as appropriate construction specifications, to ensure excavations do not cause structural damage; and
- Provide a retaining wall along Track 7 beneath the station to protect the remnants of a steel stairway and platform from track lowering activities.

Further, project plans will clearly mark the limits of the Rhode Island Historical Cemetery No. 4. Construction specifications will be developed to avoid and protect this cemetery during construction.

The RISHPO will be given the opportunity to review and comment on all subsequent design plans and field changes (shop drawings) associated with and in the vicinity of historic sites/Section 4(f) properties prior to their implementation to ensure compatibility with these resources.

Wetlands

Efforts have been made to first avoid and second minimize disturbance to wetland resources to the greatest extent possible. As indicated in the FEIS, 0.04 acres of Federal jurisdictional wetland would be affected by the project due to construction at the Pawtuxet River. As discussed in Section 5.9.4, a Section 404 permit will be required for this construction work. While State-designated Riverbank and Perimeter Wetlands would also be affected, the majority of these are not vegetated wetlands and are comprised of ballasted railroad embankment and right-of-way.

To protect adjacent wetland resources from impacts such as sedimentation, best management practices will be implemented in locations where construction activities are adjacent to wetlands. Appropriate measures will be determined in coordination with the Rhode Island Department of Environmental Management and U.S. Army Corps of Engineers via the Section 404 Permit process. In addition to the 0.04 acres of permanent disturbance that will occur at the Pawtuxet River, temporary impacts would result during the construction of the parallel bridge structure. It is expected that these impacts may be addressed through the Programmatic General Permit (PGP) provision of the Section 404 Permit process.

Water Resources

Hazardous Materials: The expansion of freight rail shipments is not expected to result in any increased threat to ground and surface water quality. Increased shipments are expected to be primarily containerized goods and automobiles, not hazardous material. While chemical shipments by rail could increase, they would continue to be held to the strict standards of the U.S. Department of Transportation regulations regarding securing, marking, and transportation. Further, given the level of separation between freight and passenger operations resulting from this project, the safety of transporting all freight (and passengers) would be improved. As indicated in Section 4.13 of the FEIS, in addition to the Providence and Worcester Railroad Company's emergency response procedures, State and local programs and contingency plans are in place to react to incidents.

In order to protect ground and surface water resources during construction, best management practices will be implemented during construction. Further, construction bid documents will require construction spill contingency plans and construction vehicle maintenance requirements be developed to address accidental release of toxic substances. At the Pawtuxet River, construction of the western abutment will include a temporary cofferdam to protect surface water quality.

Herbicide Application: Section 4.7 of the FEIS indicates any potential introduction of herbicides to water resources would be within accepted levels. In summary, herbicides sprayed on the rail corridor are intended to be absorbed by the target vegetation where they are removed from the surrounding environment. That portion of herbicide not taken up by the plants will be adsorbed onto the soil substrate where it would be biodegraded by soil micro-organisms. Should any herbicide migrate downward to the groundwater table, it would be subjected to the degradation and dilution processes. The maximum possible herbicide concentration at the point of application on the ROW is below the Action Levels. Further, application is performed by licensed contractors and conforms to all State and industry standards.

Floodplains. As indicated in Section 4.9 of the FEIS, floodplain impacts as a result of the project are expected to have a minor effect on floodplain resources (see Section 4.9). However, in order to verify this, surface water modeling will be performed at a later stage of design to determine potential upstream impacts. If flood storage compensation is required, a plan will be developed in consultation with the Rhode Island Department of Environmental Management. As with wetlands and water resources, best management practices will be implemented during construction to protect and maintain floodplain and floodway resources.

Vegetation and Wildlife

To allow for wildlife migration paths, retaining wall breaks will be constructed every 500-1000 feet in areas identified as Important and Potential Wildlife Habitat (as defined in the DEIS). Additional retaining wall breaks will be provided at the Pawtuxet River (see Section 4.9) for the same purpose. Also, the Mashapaug Pond habitat restoration (see Section 4.10) will be implemented as an enhancement.

Construction bid documents will identify any areas categorized as Important or Potential Habitat within the geographic scope of each contract. In each instance, special consideration of these resources will be required. Efforts will be made to avoid or minimize interfacing with these resources. Should they be disturbed, appropriate compensation, replacement, and/or enhancement will be required. RIDOT will coordinate with the Rhode Island Department of Environmental Management on final plan review activities during the permit application process.

Air Quality

The current funding for this project is through FRA, and no Title 23 highway funding is being planned for the project at this time. The FRIP is not a highway or transit project as defined in the conformity rule (40 CFR 51.932). Thus, the FRIP is subject to the requirements of the General Conformity Rule, and these requirements have been satisfied. If a future decision is made to use

Title 23 funding, this project would then be incorporated into a conforming Transportation Plan and Program prior to construction.

Noise and Vibration

Noise. The FEIS analysis categorized impacts into two categories: Type 1 (first row) and Type 2 (behind the first row) (see Section 4.12). As indicated in that Section, the Type 1 (117) receptors will be mitigated initially, meaning mitigation will be implemented during project construction. This will include all "severely impacted" receptors under the Federal Transit Administration methodology definitions. During the design process, an analysis will be made to determine appropriate mitigation measures for each location. Noise barriers may include earthen berms, vegetated buffers, or walls, and would be constructed at or near the edge of the ROW. However, at locations where barriers would not be feasible due to aesthetic or cost effectiveness considerations,[3] sound insulation of the affected noise sensitive buildings will be considered by FRA and RIDOT as an alternative mitigation measure. If warranted, such treatments will be investigated during the final design phase of the project.

At the location of the 38 Type 2 receptors where noise impacts are predicted, added mitigation will be studied in conjunction with other mitigation measures to be implemented by Amtrak. Type 2 residential receptors for the FRIP project would benefit from mitigation measures, such as a noise barriers, applied to these locations by Amtrak to mitigate noise for the Electrification project. Therefore, a coordinated effort by FRA and RIDOT with Amtrak in these 'shared' areas of impact would be the most appropriate manner to properly mitigate the impacts due to the FRIP.

Vibration. As discussed in Section 4.12 of the FEIS, vibration impacts (based on human annoyance criteria) would occur in the eastern section of the project study corridor at higher freight speeds. The FRIP will be designed to allow freight operations of up to 50 miles per hour in this section (FRA Class 4 standards). However, in order to mitigate these impact levels, RIDOT has agreed that freight trains will be limited to 30 miles per hour from milepost 188 to 190, which is predicted to reduce vibration impacts to acceptable standards.

Operations

Double-Stack Safeguards. Nowhere in the country do double-stack container cars operate alongside of high speed passenger trains (as defined by a top speed of 150 miles per hour). Therefore, it is vital that this precedent-setting activity be well thought out and crafted to ensure overall public safety, as well as protect passenger and freight operating windows and infrastructure. Based on previous coordination efforts between RIDOT, FRA, Providence & Worcester (P&W), and Amtrak, FRA will ensure that a number of steps will be taken to safeguard operations along the NEC. These may include:

- Track and rail design standards;
- Lubrication of high and low rail curves;
- Programmed rail profile grinding;

[3] Mitigation will be implemented in accordance with the RIDOT Noise Abatement Policy and appropriateFederal regulations.

- Loading and securement of containers in accordance with American Association of Railroads Manual M 1600;
- Inspection training program;
- Development and Implementation of operating freight railroad (Amtrak approved) inspection program (for containers and detectors);
- Monitoring of operating freight railroad's inspection program by Amtrak;
- Installation of high and wide detectors;
- Installation of shift, impact, axle count, defect, overloaded, hot bearing, and lateral and vertical force detectors at appropriate locations;
- Connection of all detection equipment into Amtrak's Centralized Electronic and Traffic Control system;
- 5.0 mile "No Meets" policy from approximately milepost 170 to 175;
- Compliance with operating procedures including specific speed limits;
- Provide for protection of rail passengers and employees at Providence Station, the future Hillsgrove Station, and the Amtrak Maintenance of Way (MOW) base; and
- Operation of double stack freight cars will be governed by operating and maintenance agreements between Amtrak and the operating freight railroad(s).

In addition, coordination meetings between FRA, RIDOT, and Amtrak to ensure the highest level of safety will continue to occur on a monthly basis, as needed, throughout the construction and implementation of the FRIP and NECIP projects.

Fencing Improvements. Based on comments received on the DEIS, the need for fencing construction and repairs along the NEC was revisited. Section 4.13 of the FEIS discusses the areas where improvements are warranted to prohibit pedestrians from entering or crossing the right-of-way (see also Appendix 4D). As indicated in this section, new fencing and fencing repairs/modifications will be implemented at the following locations:

- Old Baptist Road (approximately 1600 feet of new fencing);
- West Bay Christian Academy (approximately 1600 feet of new fencing);
- London and Duke Streets (approximately 120 feet of new fencing);
- St. Francis Parish School (approximately 240 feet of new fencing);
- Mineral Spring Cemetery (repair gaps); and
- Sacred Heart Avenue and High Street (approximately 80 foot modification to existing fence).

RIDOT will also work with Amtrak to identify additional sites where fencing improvements may be warranted within the project study area.

Construction Impacts

Traffic Circulation. Construction at a number of structures will affect highway traffic circulation. As discussed in Section 4.33 of the FEIS, a Maintenance and Protection of Traffic Plan will be developed (including detours as required) for each of the structures listed below to address potential highway traffic impacts (see Section 4.3).

- Rocky Hollow Road (temporary closure);
- Lincoln Avenue Bridge (temporary closure);
- Wellington Avenue Bridge (temporary closure);
- Cranston Street Bridge (temporary traffic restriction); and
- Dexter Street (temporary closure).

Noise and Vibration. An assessment will be made prior to commencing construction to identify potential areas where sensitive receptors may be impacted (see Section 4.12). Based on this assessment, a plan will be developed that addresses the need to implement construction mitigation. Specific mitigation may include, but is not limited to:

- Construction of temporary mitigation measures along the right-of-way such as walls or piles of excavated material;
- Route construction traffic along roadways that minimize noise impact;
- Locate equipment on the construction site as far away as possible from sensitive receptors;
- Construct walled enclosures around noisy devices/activities;
- Avoid nighttime operations to the extent possible;
- Operate only the minimum-required equipment and control equipment idling;
- Operate equipment at reduced power levels;
- Utilize vibratory pile driving techniques where feasible;
- Use specially designed quiet equipment that include closures and mufflers;
- Use quiet/lower vibration demolition methods where possible; and
- Community involvement.

Air Quality. To control adverse emissions and fugitive dust during construction, the following procedures will be required to be implemented by the contractor:

- Assurance of proper operation and maintenance of equipment;
- Wet, pave, landscape, or otherwise treat exposed earth areas;
- Cover dust-producing materials during transport;
- Limit dust-producing construction activities during high wind conditions;
- Provide street sweeping or tire washes for trucks exiting construction areas;
- Implement traffic management techniques during construction such as designating truck routes to minimize congestion related to truck traffic during peak periods.

MONITORING AND ENFORCEMENT PROGRAM

The FRA's Northeast Corridor Office and FHWA's Rhode Island Division Office will monitor further project development of the Preferred Alternative through their administration of the FRA/RIDOT grant agreement and the Federal-Aid Highway Program respectively. This monitoring will ensure that all practicable mitigation measures, as summarized above and as described in Chapter 4 of the FEIS, will be included in the final project design. FRA and FHWA staff will also perform periodic inspections, as required, during the construction phase to ensure that these measures are implemented and constructed in accordance with plans and specifications.

To facilitate effective monitoring, a system will be developed to enable FRA and FHWA to comprehensively track the fulfillment of project-related mitigation and enhancement commitments. A detailed list of all commitments made in the FEIS will be prepared. Each commitment shall be keyed to the appropriate design contract, as applicable, to ensure its implementation. RIDOT will report on the status of each commitment when the preliminary design and Plans, Specifications, and Estimates (PS&E) documents are submitted to FRA and/or FHWA. A commitment database will be developed for use by RIDOT, FHWA, and FRA to track the assignment and status of each commitment. The commitment database shall indicate positional responsibility for each of the implementation commitments, such as the project engineer, for each of these design sections.

In addition to the above, RIDOT will monitor and enforce the required project provisions in the following manner:

- RIDOT personnel will review the plans and specifications at every stage of the project development. Those reviews will involve personnel from several disciplines, including the design engineering, environmental engineering, materials construction, and research, development, and technology sections.

- RIDOT staff are presently, and will continue to be, involved in regular communications with the State and Federal regulatory agencies regarding environmental protection and mitigation features of the project.

- RIDOT staff will provide plans and specifications at every stage of development to the municipalities in which the project is located to ensure that local concerns are met.

- As discussed previously above, design features at specific historic resources will be subject to review by the RISHPO through the staff at the Rhode Island Historic Preservation and Heritage Commission (RIHPHC). RIDOT will maintain close coordination with the RIHPHC throughout this process.

- As the various sections of the project are advanced to construction, RIDOT will establish a field office on site staffed by a Resident Engineer and construction inspectors. Site visits will also be made on a regular basis by staff from the wetlands, landscape architecture, and historical preservation disciplines to monitor the implementation of the contract provisions. All requirements specified by the Rhode Island Department of Environmental Management and the U.S. Army Corps of Engineers through the wetlands permitting process will be implemented through the construction contracts and monitored by RIDOT personnel.

RESPONSE TO COMMENTS ON THE FEIS-FINAL 4(F)

Comments on the FEIS were received from Federal and State agencies and Amtrak. To a great extent, these comments reflect issues previously raised by the same organizations on the DEIS. The majority of the comments deal with final design details and will continue to be coordinated.

FRA and FHWA have carefully reviewed all comments received on the FEIS and are generally satisfied that the substantive environmental issues raised have been fully responded to. FRA and FHWA have considered all FEIS comments in reaching the decisions documented in this Record of Decision.

The following discussions highlight the substantive comments received and responses thereto.

Historic Resources

The RISHPO has noted that the preferred alternative will have noise impacts on seven properties in the East Greenwich Historic District that will have to be mitigated. The RISHPO will be consulted and have the opportunity to review and approve mitigation measures associated with and in the vicinity of historic sites/Section 4(f) properties prior to their implementation to ensure compatibility with these resources.

Amtrak stated that it did not agree to attempt to preserve the station platform and stairway at the Pawtucket/Central Falls Station and in fact expected to remove the platform as part of the lowering of Track 7. The station has been determined to be eligible by the Keeper of the National Register of Historic Places. RIDOT will ensure, as part of its construction agreement with Amtrak, that Amtrak will not remove the platform and stairway unless and until it has been proven to the RISHPO's satisfaction that there is no practicable alternative and that any and all documentation conditions requested by the RISHPO have been met. Further, although Amtrak states that the "40 Scale" plans assume the removal of the Pawtucket/Central Falls Railroad Station, the FRIP does not include removal of this historic structure.

Environmental Issues and Review Process—Water Supply

The U.S. Environmental Protection Agency (USEPA) and the Rhode Island Department of Management (RIDEM) commented on Amtrak's Herbicide Policies and several drinking wells within the project area. USEPA recommended that Amtrak commit to hand application of herbicides or substituting vegetation cutting in the vicinity of these public water supply wells. They also requested that Amtrak notify RIDEM so that agency inspectors can monitor herbicide applications.

RIDEM noted that herbicide constituents have not been reported in the groundwater and therefore recommended that Amtrak commit to developing a sampling plan for herbicide constituents at the wells in question. RIDOT will commit to working with RIDEM to identify areas of concern and develop and implement sampling plans as required. RIDOT will also commit to including the requested RIDEM notification in any maintenance agreement concluded with Amtrak.

Water Quality

As stated in the comments from USEPA and RIDEM, the details of the best management practices will need to be developed and refined to the satisfaction of these agencies before they issue permits. The project will conform to the RIDEM Stormwater Design Standards Manual, and additional steps will be taken, where feasible, to minimize the impacts of stormwater on surface and groundwaters. RIDEM's process for granting a Water Quality Certificate for this project will require RIDOT and Amtrak to provide details on the construction and maintenance of best management practices.

In addition, no creosote treatment on bridge structures over water will occur. All associated track in these areas will utilize concrete ties.

Wildlife Passage

The RIDEM has commented on the need to install three small culverts for passage of small mammals, amphibians, and reptiles. RIDOT is committed to installing the requested culverts at locations chosen in consultation with RIDEM's Fish and Wildlife Program and Amtrak.

Public Health and Safety

Hazardous Materials Emergency Response. USEPA asked that the Record of Decision clearly identify responsibility for the development of spill contingency plans during construction and operation. To protect the environment from toxic and hazardous spills during construction, RIDOT will require construction spill contingency plans be part of any construction contracts and ensure that any plans are approved by RIDEM and coordinated with the affected communities. With regards to operations, as stated in the FEIS-Final 4(f), the freight operator is responsible for, and has developed, an emergency response plan for spills during freight operations. Further, each community within the project study area has response procedures in place, which are also coordinated with the freight operator.

In response to a specific recommendation by USEPA, RIDOT will provide a sufficient number of maps of rail areas in proximity of wellhead protection and natural resource areas to emergency response personnel in the affected communities.

Double-Stack Operations. Amtrak noted that they have not agreed to the mitigation measures proposed to ensure safe operation of double-stack freight equipment in the proximity of high speed passenger trains. FHWA and FRA recognize this, and RIDOT commits to including the mitigation measures as listed under "Public Safety " herein or their equivalent, in any operations agreement that is concluded. As the agency in charge of ensuring rail safety nationwide, FRA will advise RIDOT and Amtrak which safety measures are necessary or desirable.

Additional Amtrak Comments

Amtrak described the preferred alternative as an "interim" solution to accommodating freight traffic on this segment of the Northeast Corridor. FHWA and FRA wish to correct that misunderstanding. The preferred alternative was designed to accommodate the projected level of freight and passenger service through year 2010 at a high level of operational flexibility and safety. The agencies do not anticipate a need for additional construction in the future once this project is completed.

Amtrak forwarded a concern regarding general project clearance requirements that were included in the FEIS. These clearances were developed in consultation with Amtrak and reflect minimum safety standards. At a few locations these standards (primarily for horizontal clearance) may need to be relaxed, depending upon project requirements. At these locations, RIDOT will coordinate with FRA and Amtrak to identify acceptable clearances.

Amtrak also referred to several agreements that need to be concluded between RIDOT and themselves. These include agreements on construction, operations, maintenance, and liability. FHWA and FRA acknowledge this fact, but find that lack of these agreements does not bear directly on the disclosure of environmental impacts or on the effectiveness of proposed mitigations. This Record of Decision commits the identified responsible parties to carry out the mitigation, and many of these will be accomplished through the agreements to which Amtrak referred. FHWA and FRA will ensure that these mitigation measures are included in the appropriate agreements concluded between RIDOT and Amtrak.

Errata to the FEIS

The Rhode Island Department of Environmental Management noted an error in the FEIS description of the State's water quality regulations. As noted in their comments, no Section 7 of the regulations exists. Further, the provisions listed in this section should refer to Rule 9 (not Section 7) of the water quality regulations.

In their comments, Amtrak identified a number of instances where they felt information was incorrectly stated in the FEIS. However, these remaining comments refer to design considerations that are to be developed during final design and that have no bearing on potential environmental effects of the project, the viability of the project, or the selection of the preferred alternative. Further, many of the elements described will be addressed as part of future permitting activities, or relate to construction and operations activities that will be resolved as part of the agreements between Amtrak and RIDOT noted above.

CONCLUSION

Based on the analysis and the evaluation in the FEIS-Final 4(f) and after careful consideration of the social, economic, and environmental factors and input from the public involvement process, it is our decision to adopt the Preferred Alternative (Alternative No. 3) as the proposed action for this project.

/Original Signed by/
Jolene M. Molitoris
Administrator
Federal Railroad Administration

Date: /May 13, 1998/

/Original Signed by/
Kenneth R. Wykle
Administrator
Federal Highway Administration

Date: /May 14, 1998/